Oct. 11, 1932. G. W. CASSIDY 1,882,407

DIRECT AND INDIRECT LIGHTING FIXTURE

Filed Feb. 9, 1932

FIG. 1.

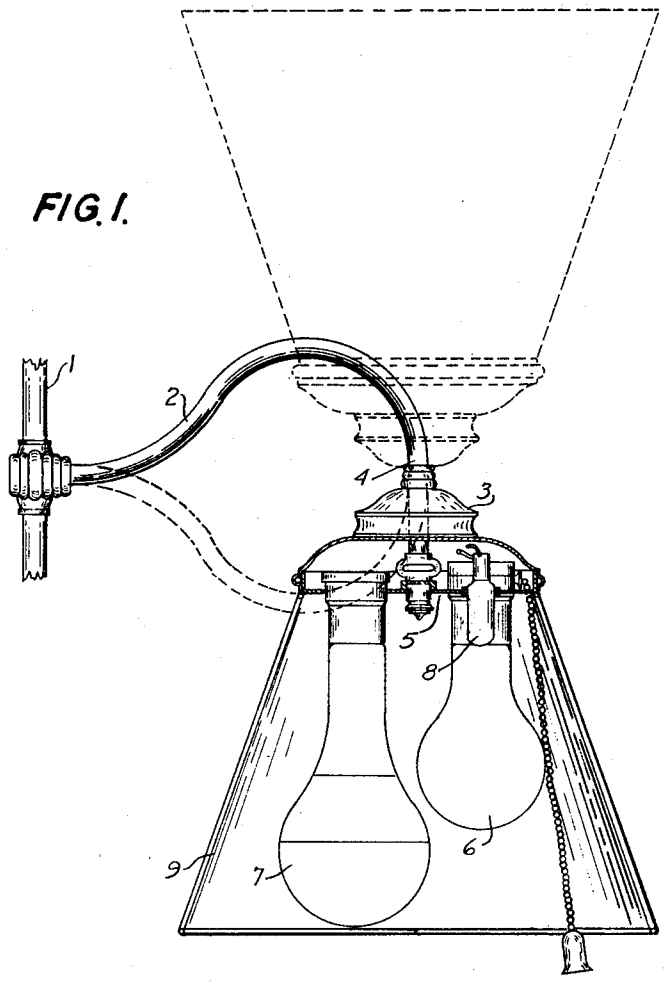


FIG. 2.

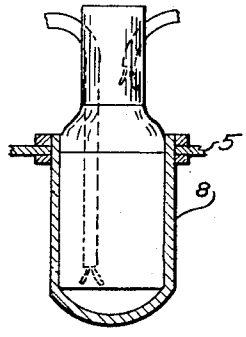
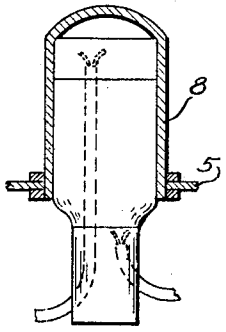


FIG. 3.



INVENTOR
George W. Cassidy
BY
Harvey Lea Dodson
ATTORNEY

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UNITED STATES PATENT OFFICE

GEORGE W. CASSIDY, OF FLUSHING, NEW YORK

DIRECT AND INDIRECT LIGHTING FIXTURE

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It is well known that many people prefer direct light for reading purposes or for local illumination but that indirect illumination is preferable for general illumination. This has been recognized and a number of reversible lighting fixtures have been devised which have never gone into extended use owing to the fact that to obtain equal results from an indirect system it is necessary to have a much larger electric lamp bulb, but such a lamp would consume an excessive amount of current if employed for direct illumination.

My invention has for its object to provide a lighting fixture which can be utilized for direct illumination for reading or local purposes without any waste of current, the fixture being provided with a bulb of the proper size and wattage to produce the desired result and which fixture shall also contain an electric light bulb of much greater size and wattage to be used as a light source for indirect illumination. My fixture is reversible and can be used for either system as desired.

A further object is to provide means to automatically cut off the current from the smaller bulb and cut it into the larger bulb by the operation of reversing the fixture from direct to indirect position and vice versa.

My means of accomplishing the foregoing objects may be more readily understood by having reference to the accompanying drawing, which is hereunto annexed and made a part of this application, in which—

Fig. 1 is a side view partly in section showing my improved lamp; and

Figs. 2 and 3 are detail views of the automatic control for the electric lamps.

Similar reference numerals refer to similar parts throughout the entire description.

As seen in the drawing my lamp is shown attached to a rod 1 (a fragmentary portion only being shown as it forms no part of my invention) on which is slidably mounted an arm 2. The arm is swiveled to a slide, of conventional form, for raising or lowering the arm 2 on the rod 1. The swivel permits the arm to be rotated upon its axis from the position shown in full lines in Fig. 1 to those shown in dotted lines in the same figure. A holder 3 is secured to the end 4 of the arm 2. A perforated plate 5 is secured to the holder 3 in any suitable or desired manner and carries two lamp bulbs 6 and 7 for approximately 40 and 150 watts respectively. I provide a control consisting of a mercury switch or container 8, formed of suitable insulating material unaffected by heat. The current passes through the switch as clearly seen in the detail views so that when the bulbs are base up, as shown in full lines in the drawing, Fig. 1, it flows only to the lamp 7. A shade 9 of any desired configuration may be suitably secured to the holder 3 and entirely closes the bulbs 6 and 7.

From the foregoing description it follows that if, for example, a person were reading with the smaller lamp 6 and guests should arrive and they wished to play cards, all that is necessary to obtain the most highly satisfactory form of illumination for that purpose is to take hold of the shade 9 or the arm 2 and turn it, this being permitted by means of the swivel, into the position shown in dotted lines, Fig. 1, as soon as the unit passes the horizontal the mercury flows to the other end of the container 8 and closes the contact between the wires leading to the lamp bulb 7 which is thus automatically lighted and throws a powerful reflected light on the ceiling and thus supply perfect indirect illumination. The lamp 7 may be the well known Silvray type furnishing its own reflector or it may be formed with an exterior reflector or the shade 9 may be supplied with a polished reflecting surface such as aluminum so as to utilize to the fullest extent the lumens from the light source. When the game is over the reverse movement of the shade will automatically turn off the larger lamp and the smaller one will furnish local illumination at a much smaller current consumption.

It will be clear from the foregoing description that my invention is not restricted to any specific construction. For example, I have shown and described a mercury switch for turning on and off the larger lamp but it will be apparent to persons skilled in the art that many forms of automatic control may be utilized for the same purpose and I do

not wish to be understood as limiting myself to any particular details except as such limitations may appear in the hereinafter contained claims.

Having described my invention what I regard as new and desire to secure by Letters Patent is:

1. The combination with a support, of a holder, a depending lamp shade secured to said holder which shade is capable of being shifted to provide either indirect or direct illumination, means on said support to permit said shade to be raised or lowered to a predetermined position, a plurality of electric lamps of different powers mounted in said shade holder, means carried by said holder to automatically turn current on to one of the lamps when the shade is shifted to the indirect position and to turn it off when it is shifted to direct position.

2. The combination with a support, of a holder, a depending lamp shade secured to said holder which shade is capable of being shifted to provide either indirect or direct illumination, means on said support to permit said shade to be raised or lowered to a predetermined position, a plurality of electric lamps of different powers mounted in said shade holder, means carried by said holder which automatically turns electric current on to one of the lamps and cuts it off from the other when the shade is shifted to the indirect position and to turn it off when it is shifted to direct position.

3. The combination with a support, of a holder, a depending lamp shade secured to said holder, which shade is capable of being shifted to provide indirect or direct illumination, means on said support to permit said shade to be raised and lowered to a predetermined position, a plurality of electric lamps of different powers mounted in said shade holder, manually operable means to turn electric current on to one lamp and automatically operable means which turns electric current on to the other when the shade is shifted to the indirect position and to turn it off when it is shifted to direct position.

4. The combination with a holder, of a depending lamp shade which is capable of being shifted to provide either indirect or direct illumination, a plurality of electric lamps of different powers mounted in said shade holder, automatically operable means to turn one of the lamps on when the shade is shifted above the horizontal to the indirect position and to turn it off when it is shifted to direct position.

5. A direct and indirect lighting fixture comprising a plurality of electric lamps of various powers, a support therefor from which said lamps depend which support can be shifted for direct or indirect lighting positions, means which automatically closes contacts to lead electric current to one of the lamps when the fixture is shifted so that the lamps assume a position in which the base is down and to break said contacts when the position of the lamps is reversed.

6. A direct and indirect lighting fixture comprising a plurality of electric lamps of various powers, a support therefor from which said lamps depend which support can be shifted for direct or indirect lighting positions, means which automatically closes contact to lead electric current to one of the lamps when the fixture is shifted so that the lamps assume a position in which the base is down and to break said contacts when the position of the lamps is reversed, and an opaque reflector for said automatically lighted lamp.

GEORGE W. CASSIDY.